

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/020491

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K39/118 A61K39/40

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/049762 A (CHIRON SPA; GRANDI, GUIDO; RATTI, GIULIO; CHIRON SRL) 19 June 2003 (2003-06-19) page 1, last line ; examples 1-6,9,10,12,16,32 page 7, line 29	1,3-22
A	----- BRUNHAM R C: "PROSPECTS FOR A CHLAMYDIAL VACCINE" PROGRAM AND ABSTRACTS OF THE INTERSCIENCE CONFERENCE ON ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, XX, XX, vol. 42, 27 September 2002 (2002-09-27), page 470, XP008042337 the whole document ----- -/--	1,3-22

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

28 February 2005

Date of mailing of the international search report

06. 07. 2005

Name and mailing address of the ISA

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 18-21 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

(1, 3-22) completely

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: (1, 3-22)-completely

Immunogenic composition comprising the combination of Chlamydia trachomatis antigens PepA+LcrE. Vaccines comprising said immunogenic composition. Use thereof in methods of treatment/diagnosis/prevention of C. trachomatis infection.

Inventions 2-25: (1, 3-22) - partially

Idem as subject 1, but restricted to each one of the combinations mentioned in Claim 1 except PepA+LcrE and PepA+LcrE+ArtJ+DnaK+CT398.

Invention 26: 2- completely; (1, 3-22) - partially

Idem as subject 1 but restricted to the specific combination PepA+LcrE+ArtJ+DnaK+CT398.

Invention 27: (8-22) - partially

Idem as subject 1 but restricted to the specific combination OmpH-like+L7/L12.

Invention 28: (8-22) - partially

Idem as subject 1 but restricted to the specific combination OmcA+AtoS.

Inventions 29-8152: (8-22) - partially

Idem as subject 1 but restricted to each one of the combinations mentioned in Claim 8 which are not covered by inventions 1-28.

Invention 8179: (23-25) - completely

Immunogenic composition comprising an oligonucleotide containing a CpG motif, a mineral salt and an antigen associated with a sexually-transmitted disease.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EKO F O ET AL: "Recombinant Vibrio cholerae ghosts as a delivery vehicle for vaccinating against Chlamydia trachomatis" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 21, no. 15, 2 April 2003 (2003-04-02), pages 1694-1703, XP004413559 ISSN: 0264-410X page 1701, right-hand column, paragraph 2 -----	1,3-22
A	SANCHEZ-CAMPILLO M ET AL: "IDENTIFICATION OF IMMUNOREACTIVE PROTEINS OF CHLAMYDIA TRACHOMATIS BY WESTERN BLOT ANALYSIS OF A TWO-DIMENSIONAL ELECTROPHORESIS MAP WITH PATIENT SERA" ELECTROPHORESIS, WEINHEIM, DE, vol. 20, no. 11, August 1999 (1999-08), pages 2269-2279, XP000900035 ISSN: 0173-0835 abstract -----	1,3-22
A	MONTIGIANI S ET AL: "GENOMIC APPROACH FOR ANALYSIS OF SURFACE PROTEINS IN CHLAMYDIA PNEUMONIAE" INFECTION AND IMMUNITY, AMERICAN SOCIETY FOR MICROBIOLOGY. WASHINGTON, US, vol. 70, no. 1, January 2002 (2002-01), pages 368-379, XP009032240 ISSN: 0019-9567 cited in the application page 375, right-hand column table 1 page 377, right-hand column, paragraph 3 -----	1,3-22

INTERNATIONAL SEARCH REPORT

Inform. on patent family members

International Application No

PCT/US2004/020491

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 03049762 A	19-06-2003	AU 2002366592 A1	23-06-2003
		CA 2469620 A1	19-06-2003
		EP 1463520 A2	06-10-2004
		WO 03049762 A2	19-06-2003
		JP 2005511076 T	28-04-2005
		US 2005106162 A1	19-05-2005
